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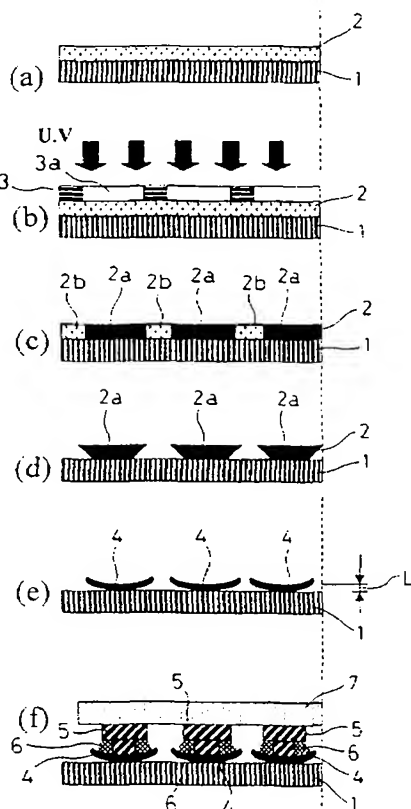
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(54) Title: FLIP CHIP PACKAGE, CIRCUIT BOARD THEREOF AND PACKAGING METHOD THEREOF



(57) Abstract: According to the present invention, when a semiconductor element (7) having protruding electrodes (5) formed thereon is connected to a circuit board (1) via conductive resin (6), stable connection is made even when an electrode pitch is small on the semiconductor element (7). On semiconductor element package regions on the circuit board (1), a paste electrode material (2) containing photopolymerizable materials is printed to form a film having a prescribed thickness, and this electrode material film (2) is baked after exposure and development thereof so as to obtain circuit electrodes (4) having edges warped in a direction of going apart from the circuit board (1) surface. Then, the protruding electrodes (5) and the concave surfaces of the circuit electrodes (4) are brought in abutment with each other and connected via the conductive resin (6) which surrounds the abutments between the respective electrodes and is held on the concave surfaces of the circuit electrodes (4). With this arrangement, the concave surfaces of the circuit electrodes (4) act as saucers and prevent the conductive resin (6) from being squeezed out, thereby eliminating possible occurrence of short circuits.

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 049 480 A (NEBE ET AL.) 17 September 1991 (1991-09-17) column 12, line 30 - column 13, line 4 ---	1,2,5,6
A	EP 0 657 932 A (MATSUSHITA ELECTRIC IND CO LTD) 14 June 1995 (1995-06-14) column 9, line 2 - line 37; figure 1 ---	1,5,6
A	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 12, 26 December 1996 (1996-12-26) & JP 08 222840 A (SUMITOMO METAL IND LTD; SUMITOMO KINZOKU ELECTRO DEVICE:KK), 30 August 1996 (1996-08-30) abstract --- -/--	1,4-6



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Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 09, 30 July 1999 (1999-07-30) & JP 11 121527 A (PFU LTD), 30 April 1999 (1999-04-30) abstract ---	1,5,6
A	US 5 338 391 A (SUPPELSA ET AL.) 16 August 1994 (1994-08-16) abstract; figures -----	

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Information on patent family members

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